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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,863	08/07/2001	Junichi Hayakawa	740670-264	7958
31780	7590	03/23/2004	EXAMINER	
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			BEFUMO, JENNA LEIGH	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/890,863	Applicant(s) HAYAKAWA ET AL.	
	Examiner Jenna-Leigh Befumo	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. The Amendment submitted on November 26, 2003, has been entered. Claims 1 – 18 have been cancelled. Claims 19 – 24 have been added. Therefore, the pending claims are 19 – 24.

Drawings

2. The drawings were received on November 26, 2003. These drawings are acceptable.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 19 – 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber, Jr. et al. (5,233,821).

Weber, Jr. et al. discloses a fabric containing a plurality of polybenzoxazole (PBO) fibers (column 1, lines 38 – 48). The PBO fibers may be grouped together to form twisted or untwisted yarn and staple or continuous yarns (column 5, lines 9 – 21). The yarn may be made into a fabric or article by knitting or weaving (column 5, lines 61 – 63). The yarn can also be a composite fiber which contains PBO fibers and aramid, glass, gel-spun polyethylene or steel fibers as cut resistant fibers (column 6, lines 1 – 12). The cut resistant fibers are preferably present in the core of the yarn and wrapped by wrap fibers (column 6, lines 13 – 17). The wrap fibers can be conventional wrap fibers such as cotton, polyester, or nylon (column 6, lines 19 – 21). In the examples, Weber, Jr. et al. discloses that the polyester wrap yarn is dyed polyester (Table 2).

Additionally, Weber, Jr. et al. refers to additional patents which teach how to make yarns and fabrics containing commingled and composite fibers and/or two types of fibers woven together, where PBO can be used instead of, or in addition to the aramid fibers (column 6, lines 46 – 60). Kolmes et al. (US 4,936,085) discloses a core wrapped fiber which contains cut-resistant fibers and nylon or polyester strands (abstract). Warner (US 4,918,912) teaches a spun yarn comprising a blend of three different staple fibers (abstract). And Giesick (US 4,856,110) discloses a woven material having cut resistant metal or aramid fibers mixed in a sock (abstract). Therefore, claims 19 – 21 and 23 are anticipated by Weber, Jr. et al.

With respect to claims 22 and 24, the limitation that the woven fabric is used in a loud-speaker is viewed as intended use since the claims fail to positively recite the structure of the loud-speaker other than the woven fabric itself. Further, it has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitation. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, these claims are also anticipated by Weber, Jr. et al.

Response to Arguments

5. Applicant's arguments filed November 26, 2003 have been fully considered but they are not persuasive. The Applicant argues that the prior art does not teach all the elements of the claimed invention. Specifically, the Applicant argues that the prior art does not teach the loud speaker diaphragm structure (Response, page 6 – 7). First, it has been held that if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

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Further, it has been held that “Arguments that the alleged anticipatory prior art is nonanalogous art’ or teaches away from the invention’ or is not recognized as solving the problem solved by the claimed invention, [are] not germane’ to a rejection under section 102.” *Twin Disc, Inc. v. United States*, 231 USPQ 417, 424 (Cl. Ct. 1986) (quoting *In re Self*, 671 F.2d 1344, 213 USPQ 1, 7 (CCPA 1982)). In other words, if the prior art teaches all the positively recited structural limitations then it will anticipate the claimed invention even if the claimed invention has a different use.

Therefore, with respect to claims 19 and 20, the preamble recites a “woven fabric for loud speaker diaphragm using a woven fabric”. The loud speaker diaphragm is not positively recited, and is considered intended use, and the prior art should only be capable of performing the intended use, which in this case is true. Further, claims 21 and 23 which recite “a diaphragm for a loud speaker” in the preamble is interpreted as intended use since the Applicant fails to recite any further structural limitations to the woven fabric. In this case, the woven fabric taught by Weber, Jr. et al. can be used as a diaphragm since it has the same structural limitations as the prior art and thus anticipated the claimed invention. And with respect to the loud speaker claims, again the Applicant only positively claims the woven fabric without providing any structure for the diaphragm or loud speaker. Therefore, the rejection is maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo
March 3, 2004



CHERYL A. JUSKA
PRIMARY EXAMINER